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SOLAR DESALINATION PLANT

**A) Amendments to the claims:**

Claim 1 (cancelled)

Claim 2 (new): A solar desalination plant comprises of :

- (a) a transparent double chamber embodiment containing a main chamber in bell shape and an auxiliary chamber in oval shape and the auxiliary chamber being fixed on the top of the main chamber, and
- (b) the said main chamber being mounted on the foundation wall of a well being in a reservoir of saline or dirty water to be distilled by the solar energy, and
- (c) the main chamber containing black tubes with vanes known as the heat exchange tubes and the heat exchange tubes being partially immersed and spread on the surface of the water in the well of the reservoir, and
- (d) the bottom of the said auxiliary chamber being connected to a water collecting tank through a cistern and a siphon pipe.

Claim 3 (new): The solar desalination plant with the embodiments described in the claim 2 (new), is incorporated with a solar heating system consisting of :

- (a) a concave solar dish containing an arrangement of black tubes known as heating tubes filled with a volatile liquid-coolant and the heating tubes being connected to the said heat exchange tubes, by means of an automatic coolant circulating system, and
- (b) the automatic coolant circulating system comprising of a spring diaphragm, expansion cell and the means of connections to circulate the coolant through the heat exchange tubes when the coolant gets heated up in the heating tubes by the solar energy.

Claim 4(new): The solar desalination plant as per the claim 2 (new), consisting of the main chamber and the main chamber being surrounded by an open vertical cylindrical shell reflector to direct the sunrays to fall on the said heat exchange tubes in the well of the main chamber.